

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/079666 A1

(51) International Patent Classification⁷: **A61B 5/024**,
5/0444

(21) International Application Number:
PCT/EP2005/001887

(22) International Filing Date: 23 February 2005 (23.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04004114.7 24 February 2004 (24.02.2004) EP

(71) Applicant (for all designated States except US):
NEOVENTA MEDICAL AB [SE/SE]; Ågatan 32,
S-431 35 Mölndal (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): OUTRAM, Nicolas
[GB/GB]; 17 Fitzford Cottage, Tavistock PL19 8DB (GB).
ROSEN, Karl, Gustaf [SE/SE]; Karantängsgatan 13, S-442
35 Kungälv (SE).

(74) Agent: AWAPATENT AB; Box 11394, S-404 28 Göte-
borg (SE).

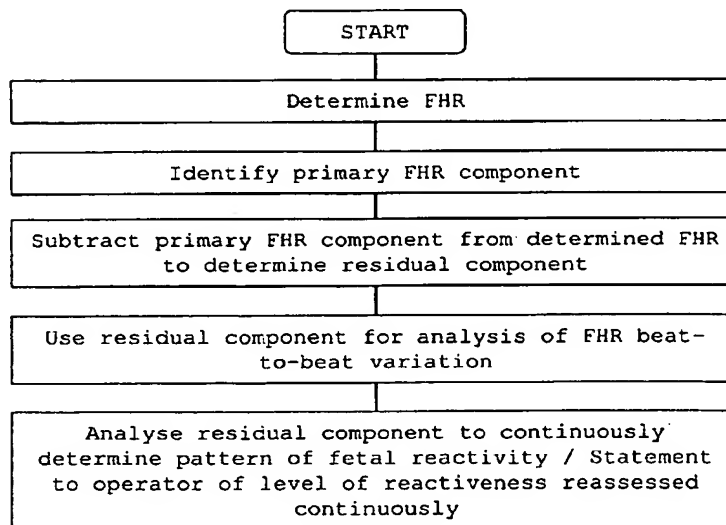
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: ASSESSMENT OF FETAL REACTIVITY BY FETAL HEART RATE ANALYSIS



(57) Abstract: The present invention relates to the field of fetal heart rate (FHR) monitoring. In particular, it relates to monitoring during periods of so-called non-stationary fetal heart rate patterns, such as those that occur during labour. The invention provides an improved apparatus, method and computer program for more clear analysis of FHR variations, such that fetal distress can be correctly assessed earlier. According to one aspect, the invention comprises means for determining a fetal heart rate, means for identifying a primary fetal heart rate component, means for subtracting the primary component from the determined fetal heart rate to determine a residual component, and means for using said residual component for analysis of the fetal heart rate beat-to-beat variation.

WO 2005/079666 A1



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.